

# Studying Ultra High Energy Cosmic Rays with the Telescope Array

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4:00 p.m. - Wilson Hall, One West

The Telescope Array measures the properties of ultra high energy cosmic ray induced extensive air showers. We do this using a variety of techniques utilizing an array of scintillator detectors to sample the footprint of the air shower when it reaches the Earth's surface and telescopes to measure the fluorescence and Cerenkov light generated by the air shower. From this we determine the energy spectrum and chemical composition of the primary particles. We also search for sources of cosmic rays and anisotropy. We have found evidence of a possible source of ultra high energy cosmic rays in the northern sky. The experiment and its most recent measurements will be discussed.